1.3Mega Pixel

IP Camera

IP SurvIliance

User's Manual

V_1.5

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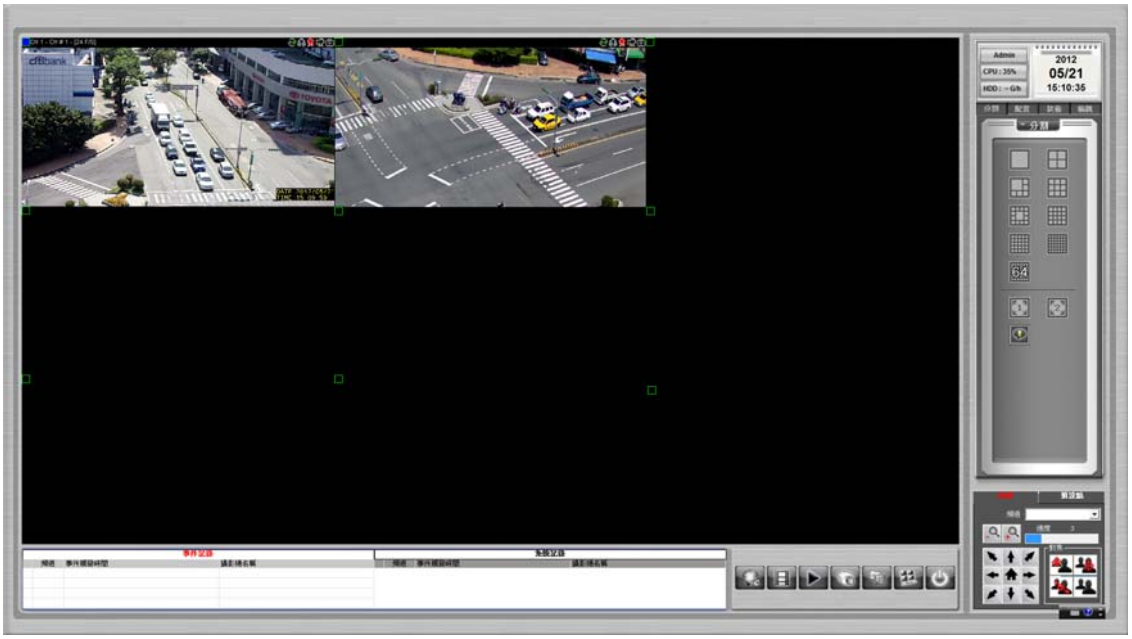
Over View

1.1 Features

- 1.3 megapixel CMOS Sensor
- Real-time H.264
- Built-in high sensitive microphone (Optional)
- Supports ONVIF Standard to Simplify Integration and Enhance Interoperability
- Supports H/W Watchdog

1.2 CMS Camera Management Software

You can install CMS on a PC to management your IP Camera, please refer to “CMS User's Manual-V1.0.pdf”.



Installation

2.1 Minimum PC Requirement

- Hardware:

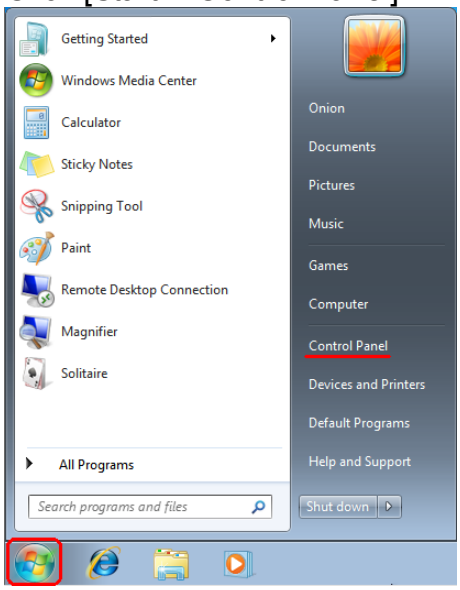
  Intel® Pentium® DUAL Core™
  2 GB system memory or above
  Sound Card: DirectX® 9.0c compatible sound card
  Video Card: 3D hardware accelerator card required – 100% DirectX®9.0c compatible
  Ethernet network port/card
  10/100 Ethernet switch/hub

- Software:

  Windows® XP Service Pack 2 or above
  Resolution of screen setting: 1280x960 or higher for the display of 720P/1080P

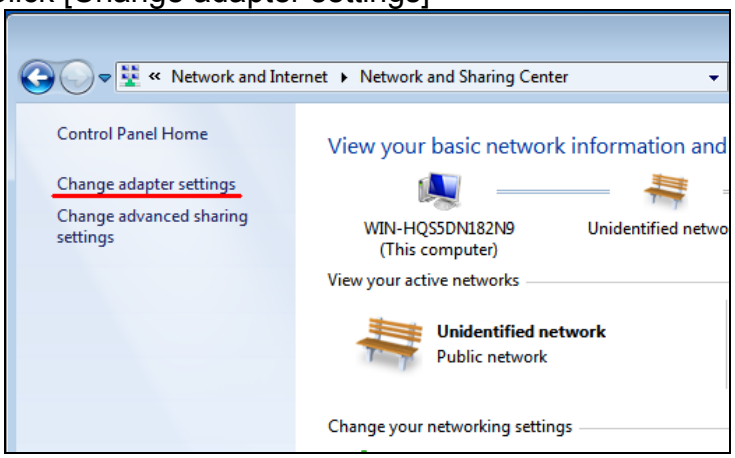
- Change computer's IP address – Please set IP address to be "192.168.1.3".
  (You can also searching IP Camera in LAN with the tool – IPSearcher, please refer to appendix A)

  Click [Start-> Control Panel]

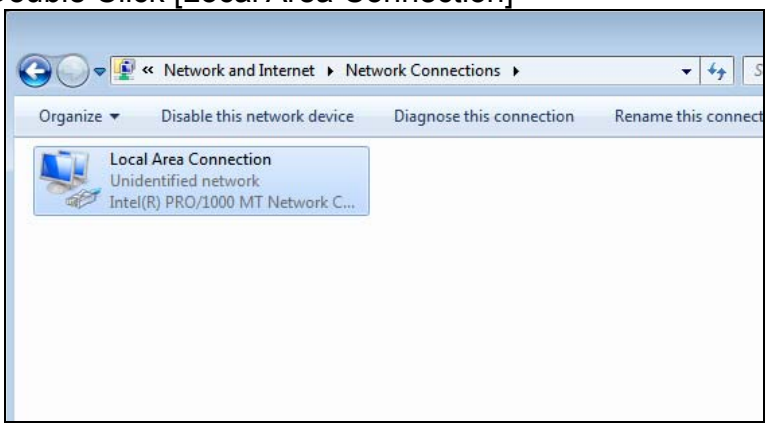


  Click [View network status and tasks]

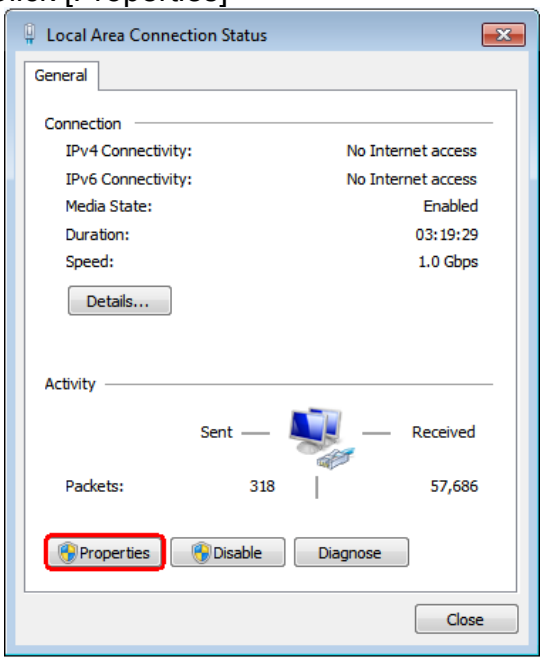
Click [Change adapter settings]



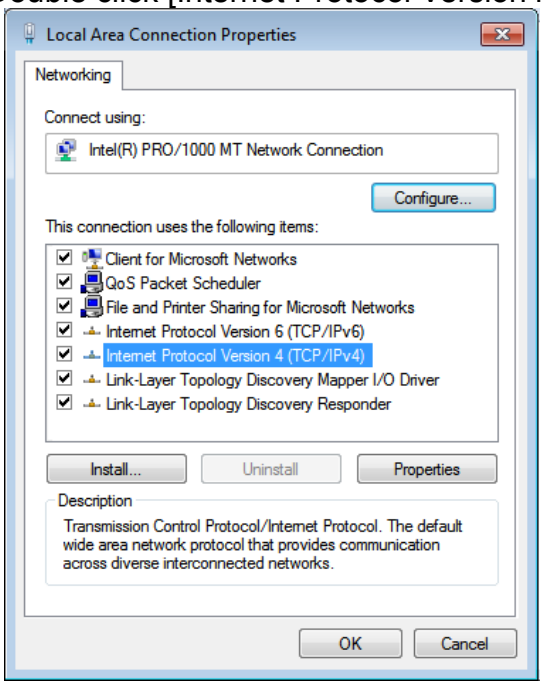
Double Click [Local Area Connection]



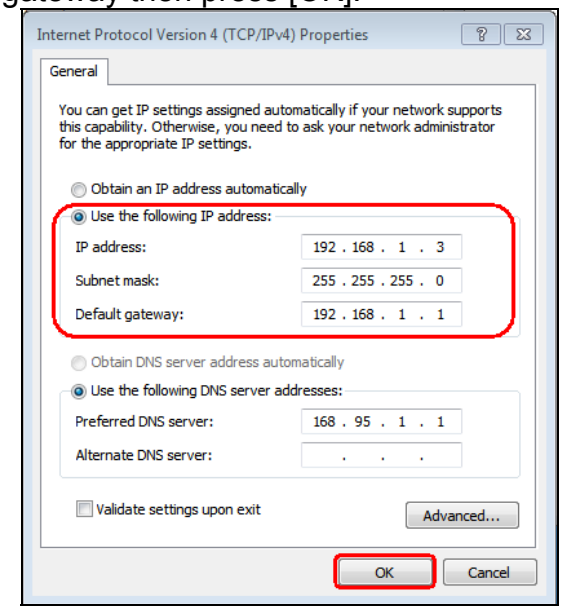
Click [Properties]



Double click [Internet Protocol Version4(TCP/IPv4)]

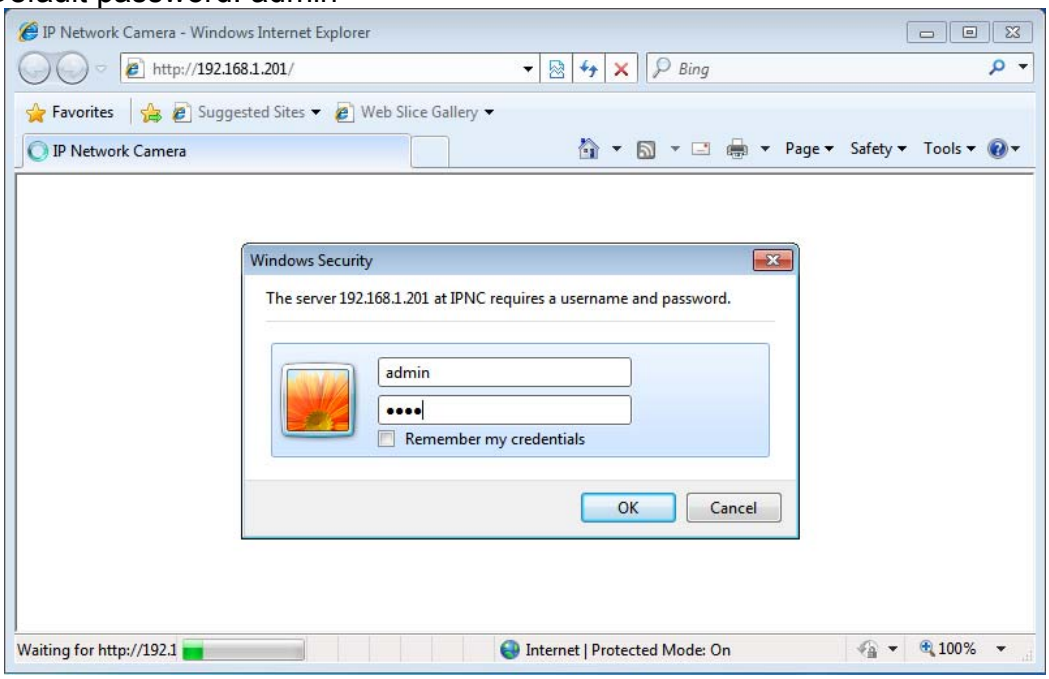


Select [Use the following IP address] and enter IP Address, Subnet mask and Default gateway then press [OK].


Internet Protocol Version 4 (TCP/IPv4) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 192 . 168 . 1 . 3
Subnet mask: 255 . 255 . 255 . 0
Default gateway: 192 . 168 . 1 . 1
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server: 168 . 95 . 1 . 1
Alternate DNS server:
Validate settings upon exit
Advanced...
OK
Cancel

■ Login IP Camera with a WEB browser

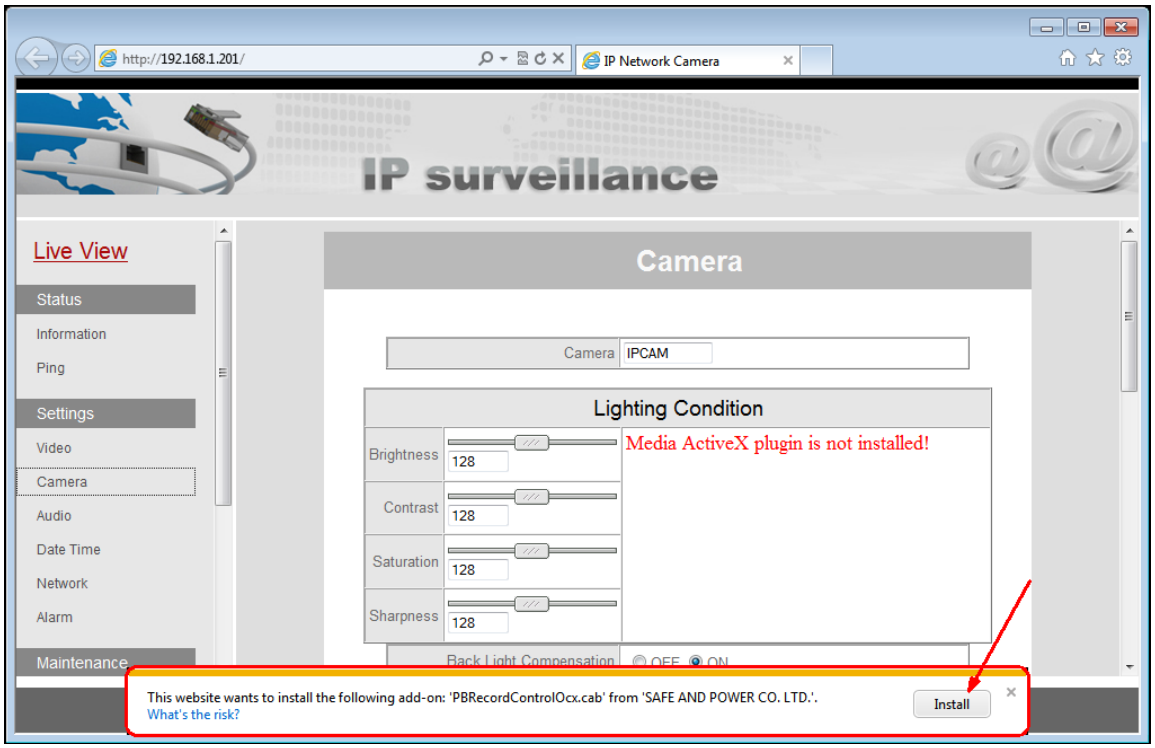
You may visit IPCamera's homepage by IE or other compatible web browsers.
Running a browser and enter IP Camera's IP- 192.168.1.221 in URI.
Default account: admin
Default password: admin

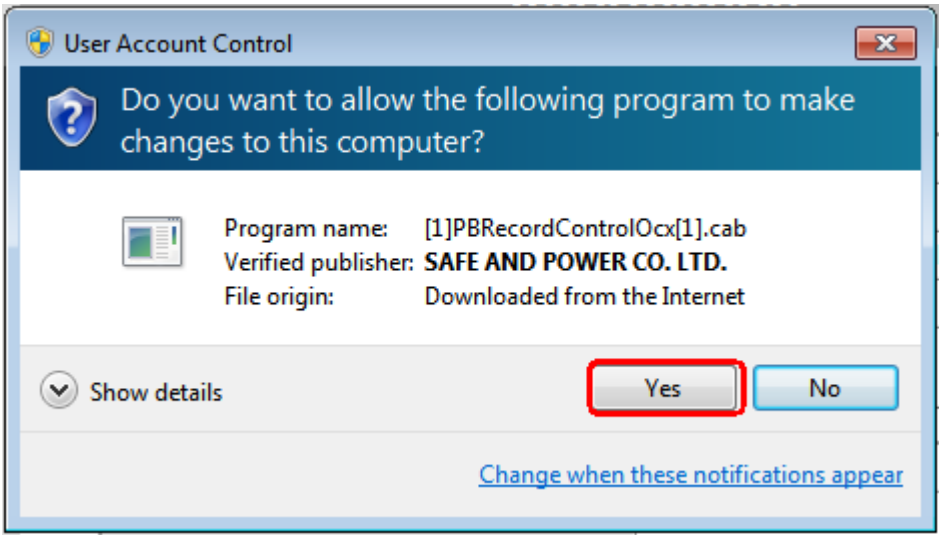


It displays system information after you login IP Camera.

2.2 Live View

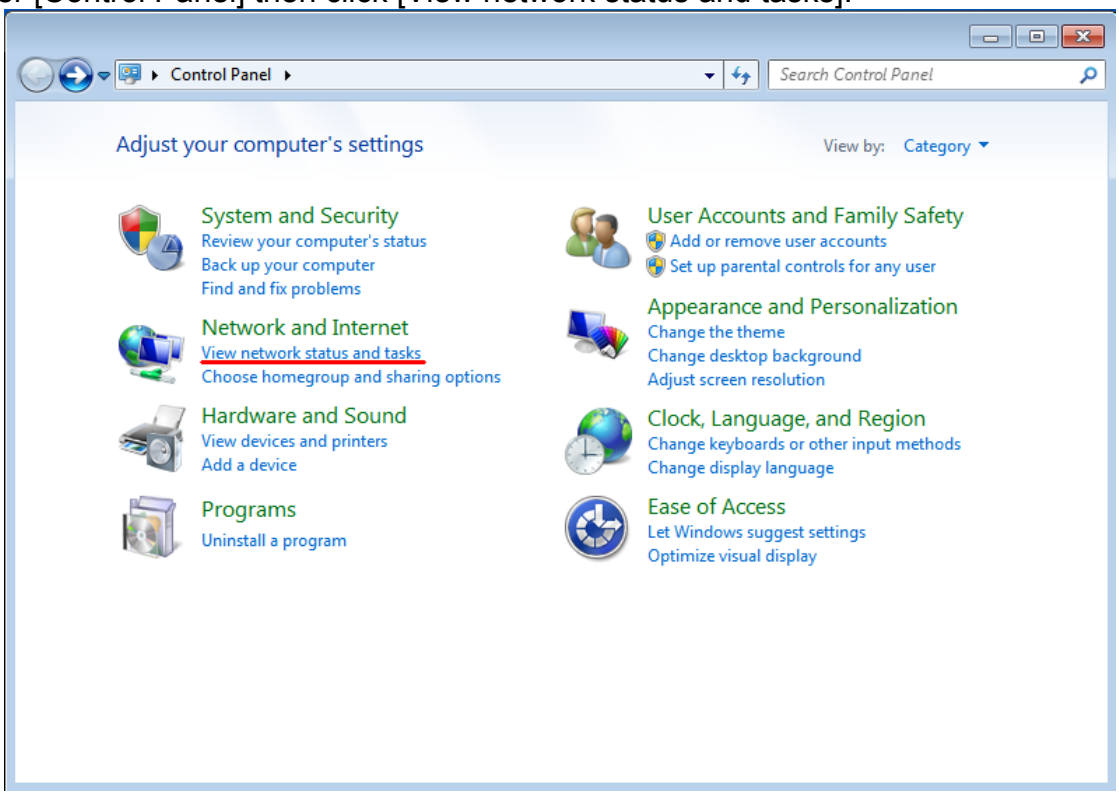
If you prefer using Safari®, Chrome® or Firefox®, you have to install QuickTime® Player or the browsers can't display video. If you use Windows Internet Explore it will ask you install ActiveX program when you first login.



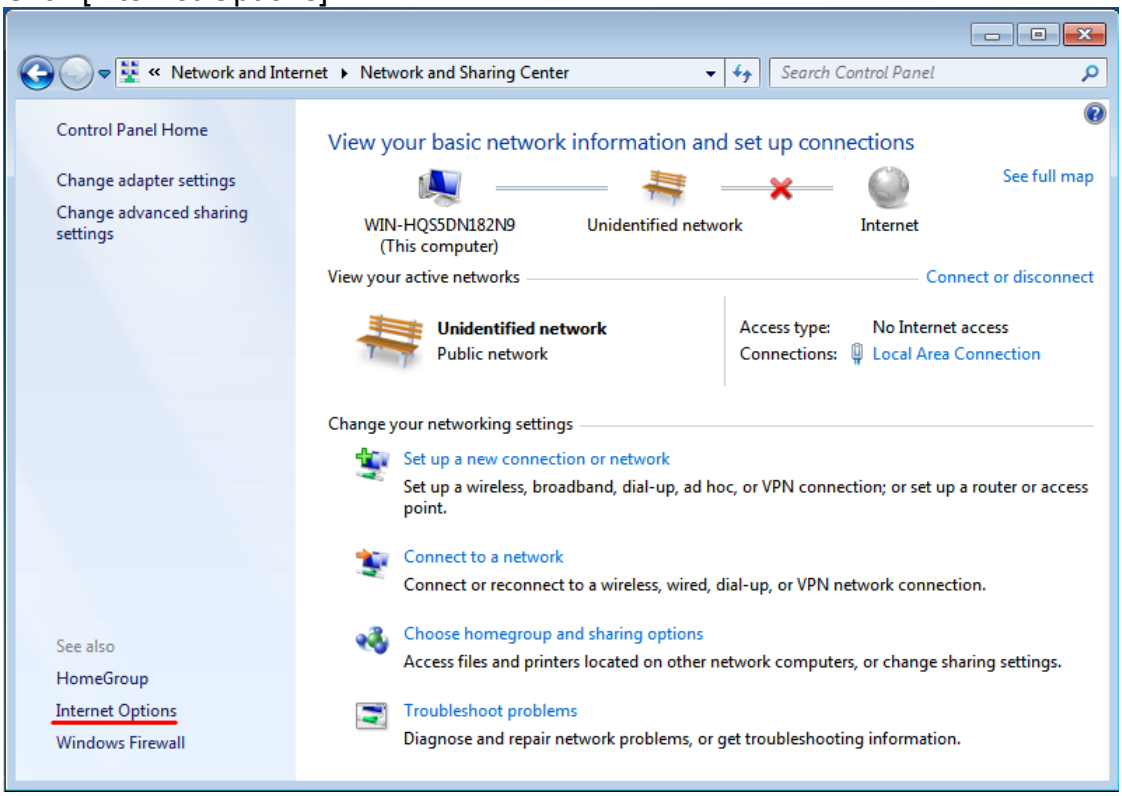

User Account Control
Do you want to allow the following program to make changes to this computer?
Program name: [1]PBRecordControlOcx[1].cab
Verified publisher: SAFE AND POWER CO. LTD.
File origin: Downloaded from the Internet
Show details
Yes
No
Change when these notifications appear

You may need to change security parameter for Live View Player playing video well.

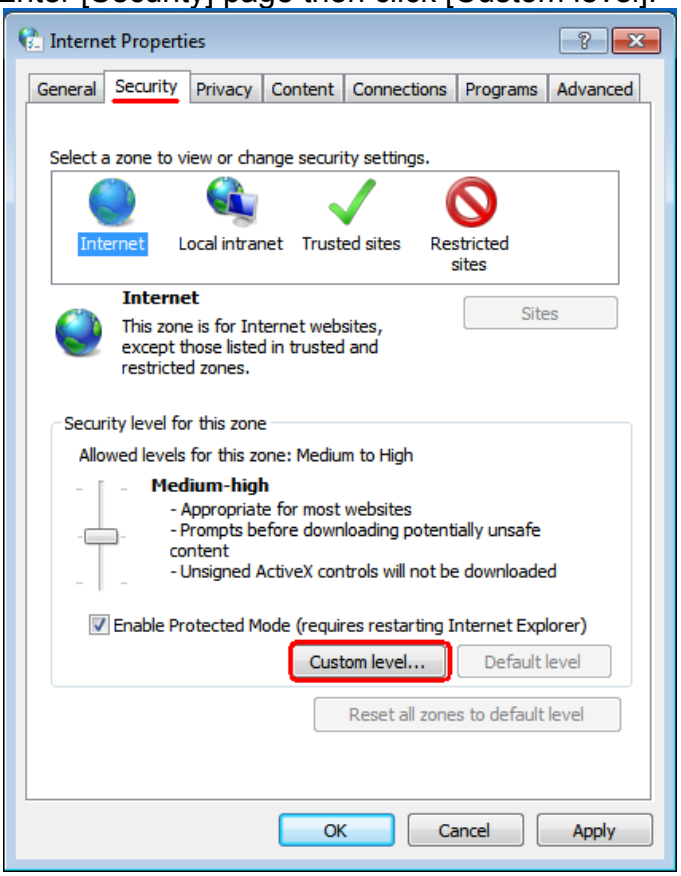
Enter [Control Panel] then click [View network status and tasks].



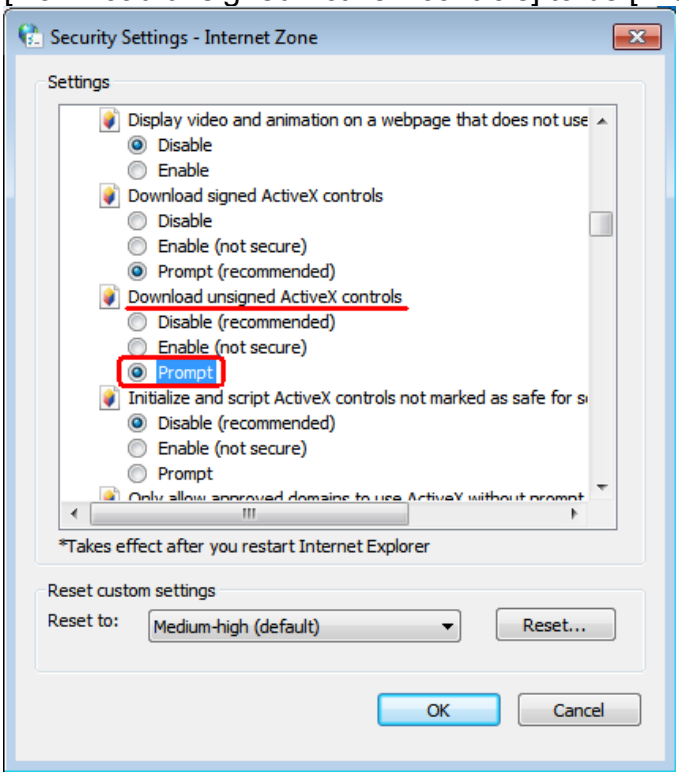
Click [Internet Options].


Network and Internet
Network and Sharing Center
Search Control Panel
Control Panel Home
Change adapter settings
Change advanced sharing settings
View your basic network information and set up connections
See full map
WIN-HQS5DN182N9
(This computer)
Unidentified network
Internet
View your active networks
Connect or disconnect
Unidentified network
Public network
Access type: No Internet access
Connections: Local Area Connection
Change your networking settings
Set up a new connection or network
Set up a wireless, broadband, dial-up, ad hoc, or VPN connection; or set up a router or access point.
Connect to a network
Connect or reconnect to a wireless, wired, dial-up, or VPN network connection.
Choose homegroup and sharing options
Access files and printers located on other network computers, or change sharing settings.
Troubleshoot problems
Diagnose and repair network problems, or get troubleshooting information.
See also
HomeGroup
Internet Options
Windows Firewall

Enter [Security] page then click [Custom level].



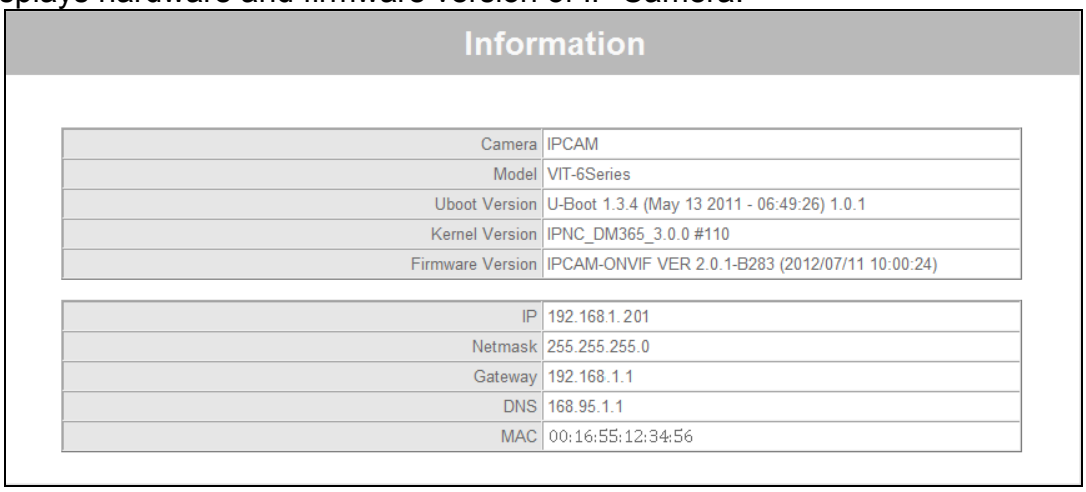
Set [Download unsigned ActiveX controls] to be [Prompt].



2.3 Status

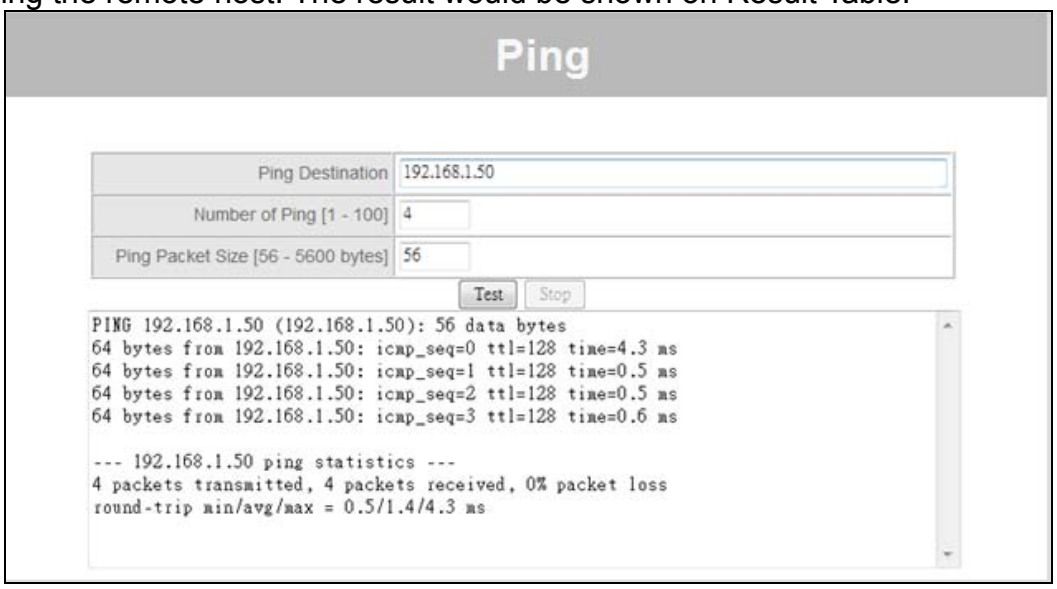
2.3.1 Information

It displays hardware and firmware version of IP Camera.



2.3.2 PING

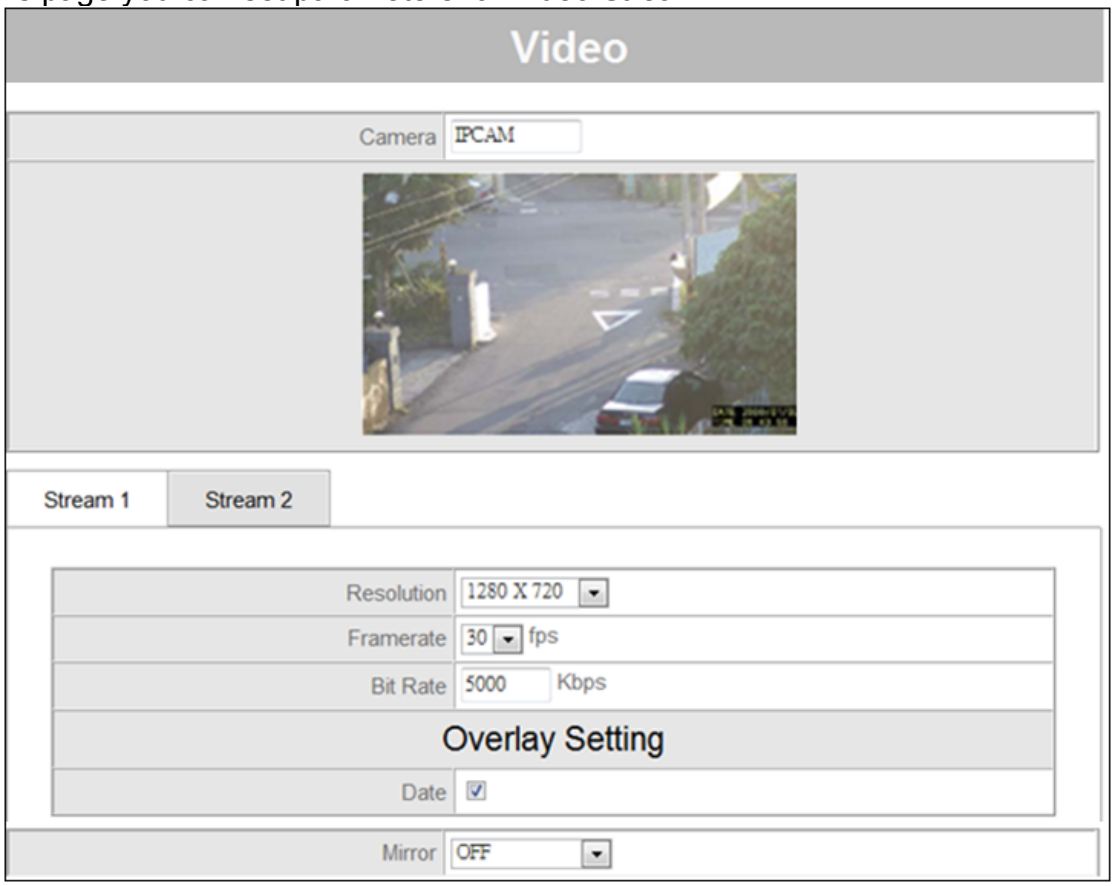
Use “Ping” to verify if a remote peer is reachable. Enter a remote IP address and click “Test” to ping the remote host. The result would be shown on Result Table.


Ping
Ping Destination 192.168.1.50
Number of Ping [1 - 100] 4
Ping Packet Size [56 - 5600 bytes] 56
Test
Stop
PING 192.168.1.50 (192.168.1.50): 56 data bytes
64 bytes from 192.168.1.50: icmp_seq=0 ttl=128 time=4.3 ms
64 bytes from 192.168.1.50: icmp_seq=1 ttl=128 time=0.5 ms
64 bytes from 192.168.1.50: icmp_seq=2 ttl=128 time=0.5 ms
64 bytes from 192.168.1.50: icmp_seq=3 ttl=128 time=0.6 ms
--- 192.168.1.50 ping statistics ---
4 packets transmitted, 4 packets received, 0% packet loss
round-trip min/avg/max = 0.5/1.4/4.3 ms

2.4 Settings

2.4.1 Video

In this page you can set parameters for Video Stream.



Camera: Type the camera title.

Resolution: Select the required image resolution for the streams.

TAB for Stream 1- Stream 2: For setting individual parameters for each stream.

Frame Rate: Select the required frame rate for video stream.

Bit Rate: Bit-rate values ranges between 512 and 6144.

Overlay Setting:

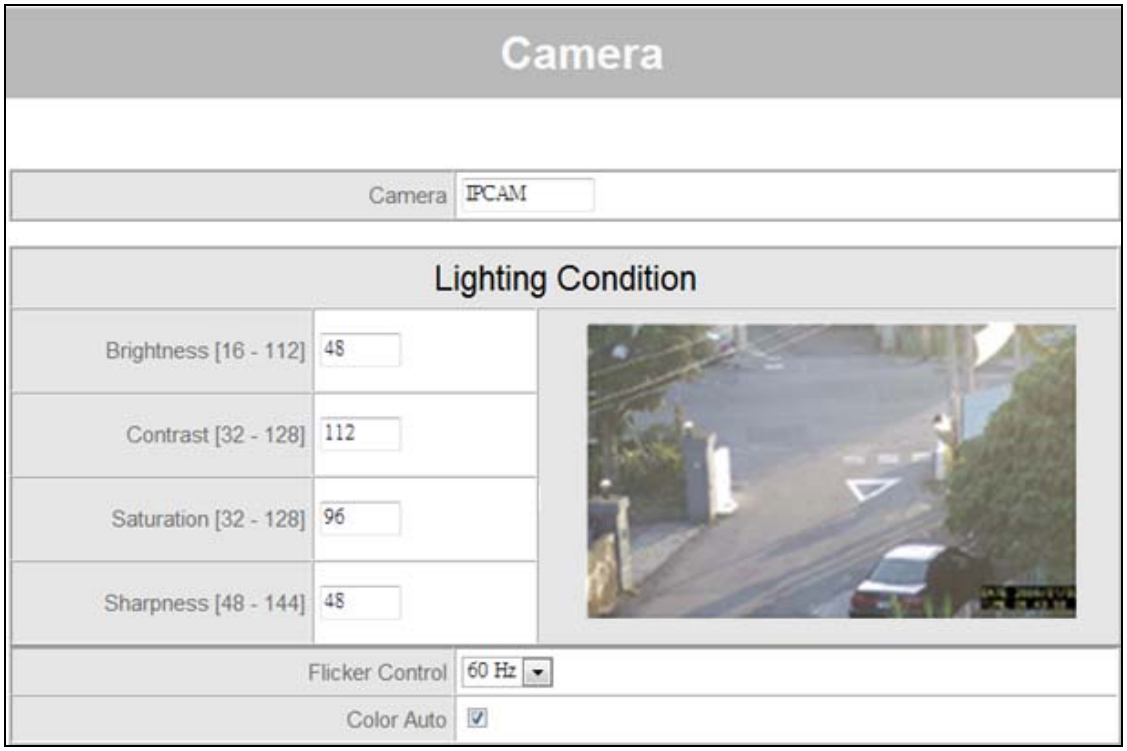
Select Enable Date and Time check box to activate the function.

◎Date: This will enable/disable insertion of Data and Time as per the position specified corner of the captured image.

Mirror: Select the required option

◎OFF
◎VERTICAL: Flips the data in vertical direction
◎HORIZONTAL: Flips the data in horizontal direction
◎BOTH: Flips the data in both directions, equivalent to 180 rotation

2.4.2 Camera



Brightness: Select the required brightness level that ranges from 1 to 255. A brighter scene appears, if you choose higher level of brightness.

Contrast: Select the required range. The range available is between 1 to 255.

Saturation: Select the required saturation level that ranges from 1 to 255. A vivid scene appears, if you choose a higher level of saturation.

Sharpness: Select the required range of sharpness. The range available is between 1 to 255.

Flicker Control: Select one of the following options of the Flicker device:

◎ NTSC/60Hz : This will compensate for 60Hz flicker and will put the display if selected to NTSC mode

◎ PAL/50Hz : This will compensate for 50Hz flicker and will put the display if selected to PAL mode

Color Auto: Disable this option to keep IP camera displays video always in color mode.

PTZ: (Optional)

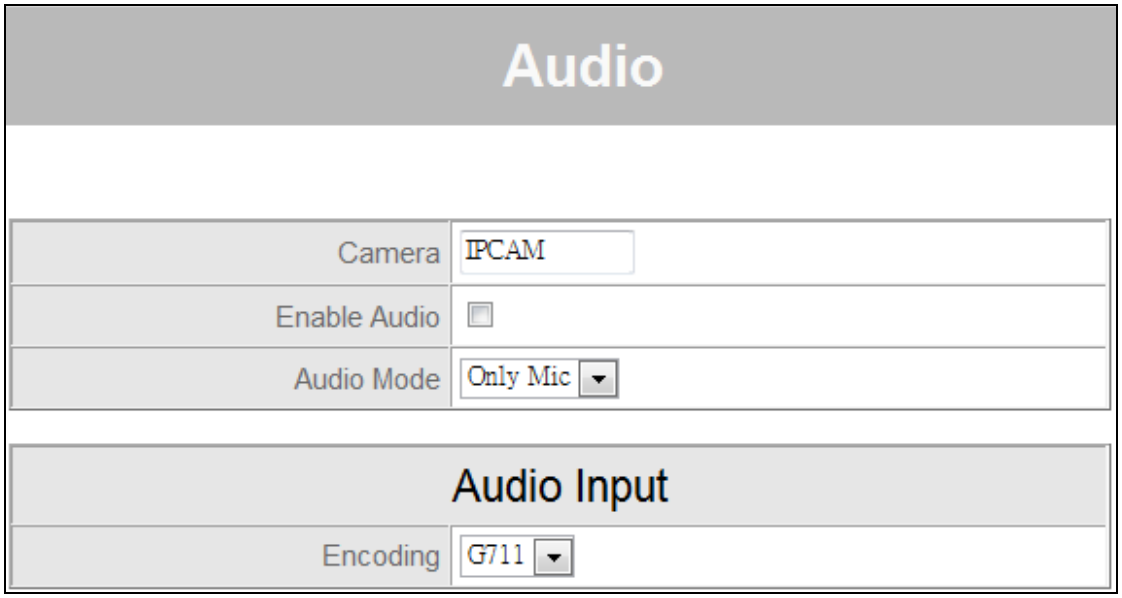
◎ Protocol: Select a protocol for IPCamera and Pan-Tilt System.

◎ Device ID/ Baud Rate: Select device ID(or address) and baud rate assigned on Pan-Tilt System.

◎ Speed: The Pan-Tilt System is moving quicker if you set it to be higher..

◎ Min. Move Time: Some control device sends PTZ move and stop command at the same time. Enable this option for IPCamera to transit PTZ moving command in a fixed period of time.

2.4.3 Audio



Enable Audio: This will switch ON/OFF the audio in camera.

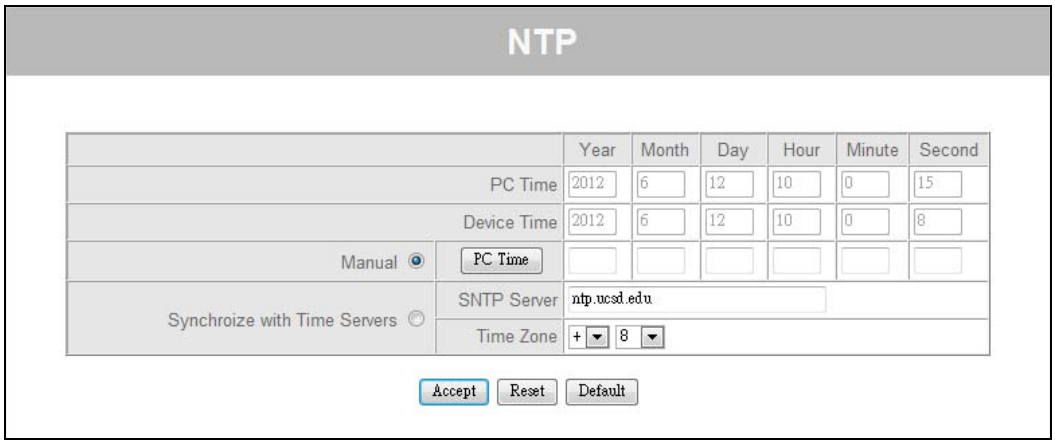
Audio Mode: You can change the audio mode in the Network camera in one of the following ways:

◎ Only Mic: Enables only audio capture in camera.

Encoding: Set which codec is used for encoding. G711 and PCM.

2.4.4 Date Time

The NTP configuration allows IP Camera obtain time from an NTP server or sync with your computer.



PC Time: It displays current time on your computer.

Device Time: It displays current time on IP Camera.

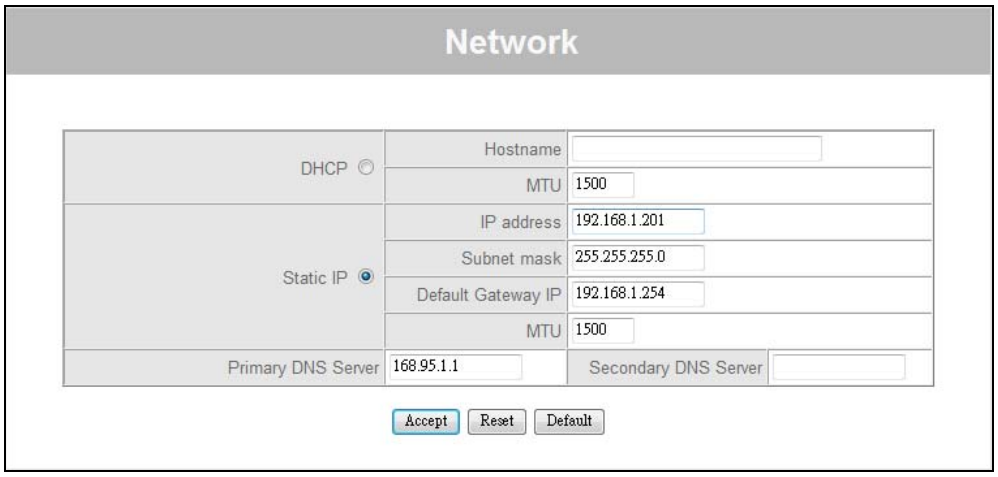
Manual: Click [PC Time] then [Accept] button to sync IP Camera's time with your computer.

Synchronize with Time Server:

◎ SNTP Server: Enter IP or FQDN of an SNTP server.

◎ Time Zone: Select the required time zone from the drop-down list. If this is not done, the time given by the unit may be incorrect.

2.4.5 Network

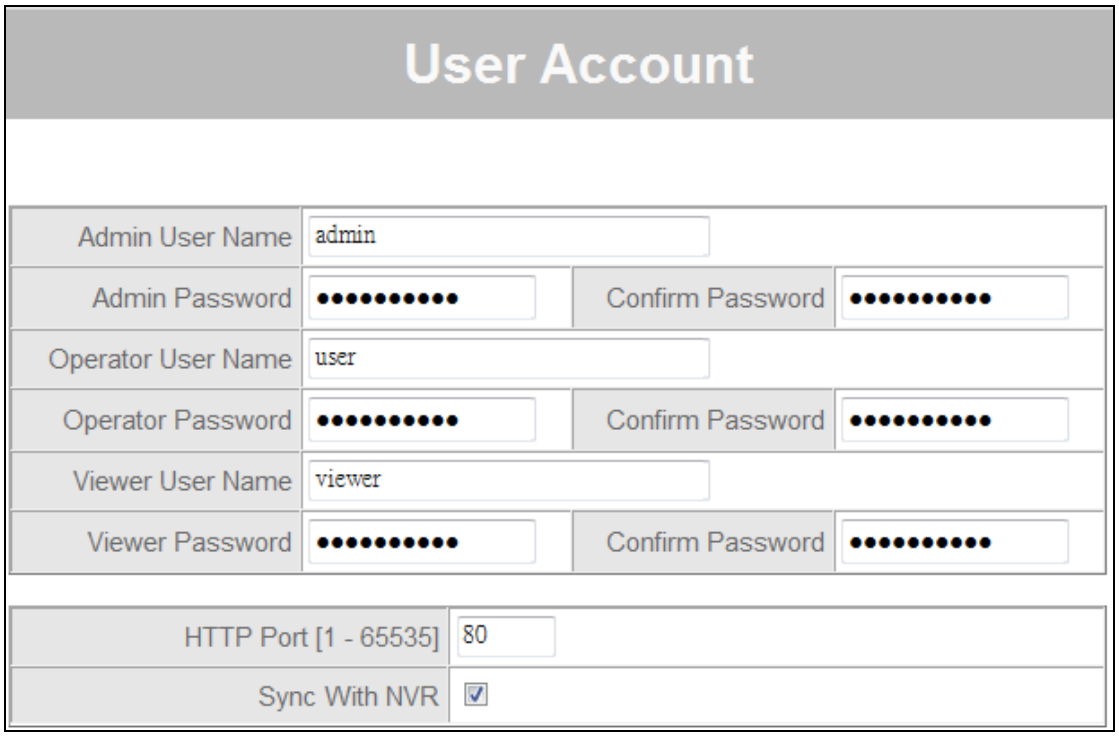


There are two types of IP network settings, if there is a DHCP server or broad band router setup in your IP network, you may set it to be DHCP. If you set up a NVR(Network Video Recorder) to recording IP Camera's video, it is better set IP type to be "Static IP".

2.5 Maintenance

2.5.1 User Account

There are three operating levels when entering the Web UI. Logging-in as the admin allows you to change all settings.



Admin: You can operate all functions in Web interface.

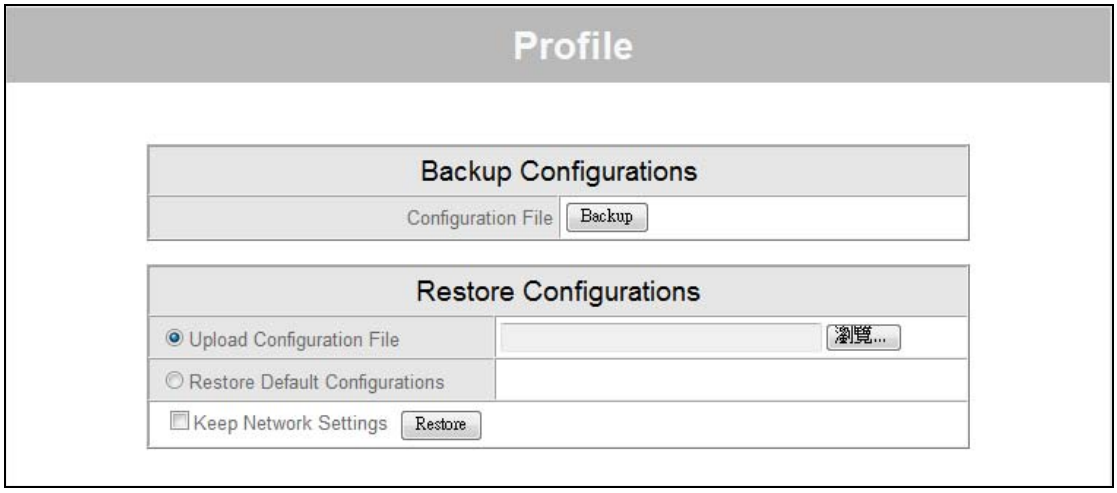
Operator: You can operate all functions in Web interface except User Account.

Viewer: You can only monitor the Web interface, but cannot operate all function and set parameters.

HTTP Port: You can change listen port of WEB GUI.

Sync With NVR: When this option is disabled, it doesn't allows modify command sent from NVR or via HTTP API.

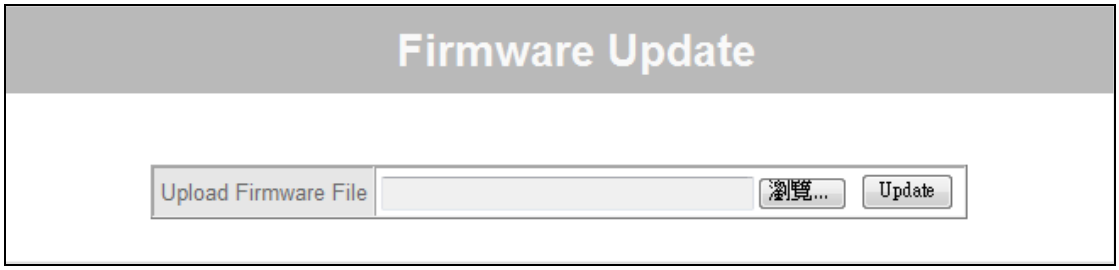
2.5.2 Profile



Backup Configurations: Click the Backup Settings button to save your current settings to a file.

Restore Configurations: You can backup settings to a file and restore settings from that file. You also can restore all settings back to default by selecting Restore Default Configurations and click Restore.

2.5.3 Firmware Update



Please select then click [Update] button to upload firmware. During the upgrade process please don't click on any other button or don't try changing camera setting, this may lead camera to abort upgrade process and subsequent reboot will result in undesired behavior.

2.5.4 Restart

Tick [Restart] then click [Accept] button to restart IPCamera.

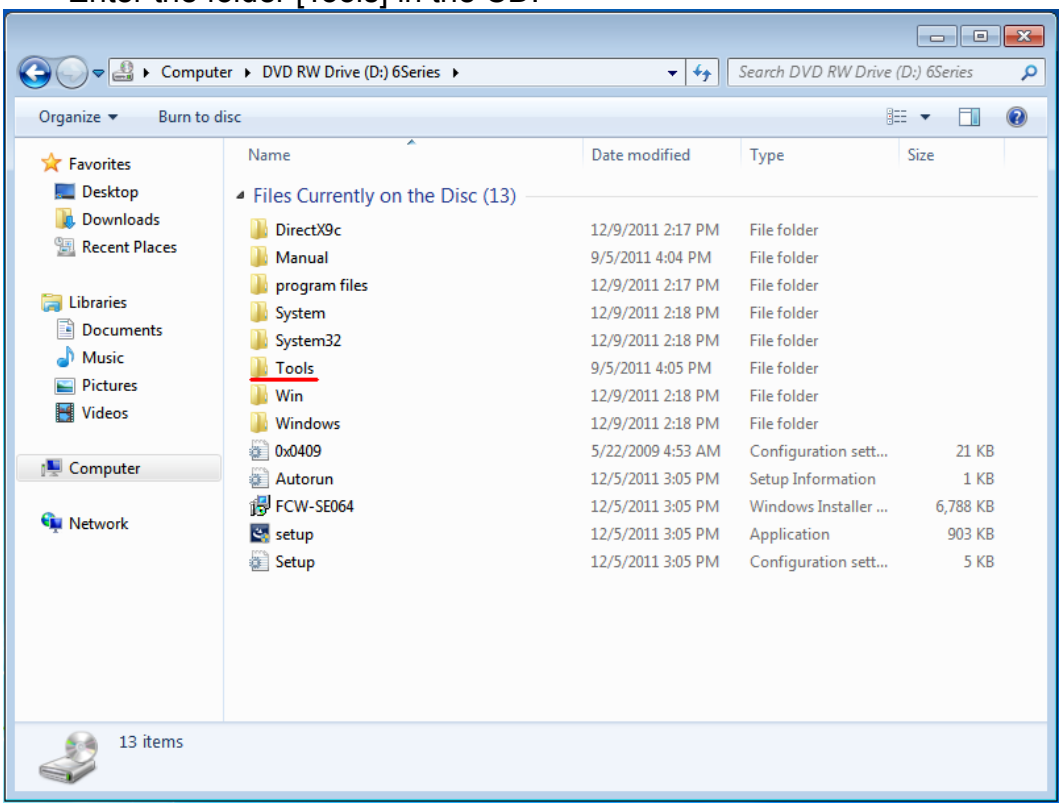
2.5.5 Language

Select a language for WEB GUI.

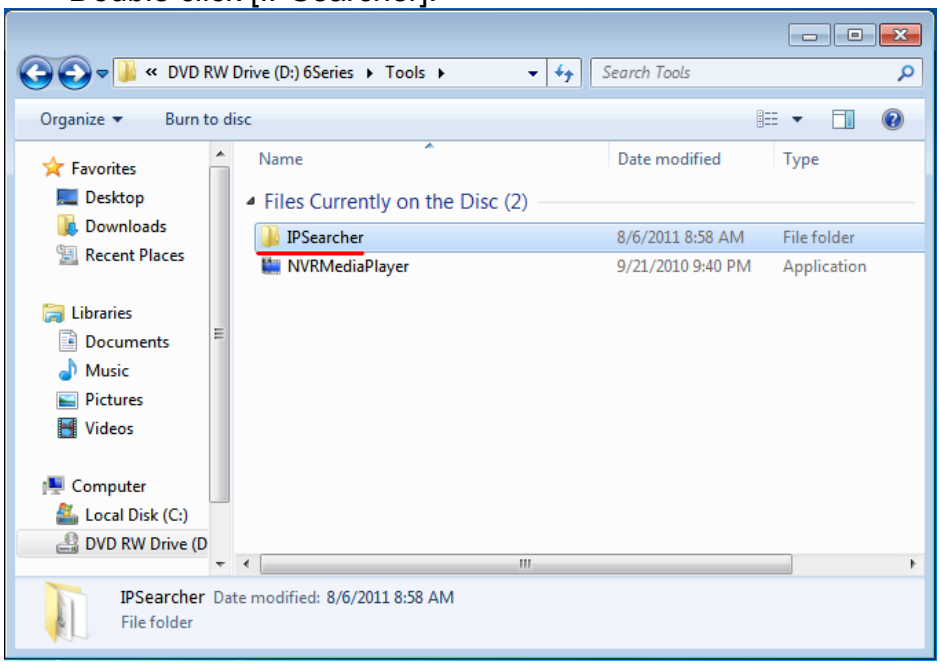
Appendix A – IPSearcher for searching IP Camera on LAN

There is a tool which can running on a computer to search IP Camera in local area network. It allows you to change IP Camera's IP address much easier.

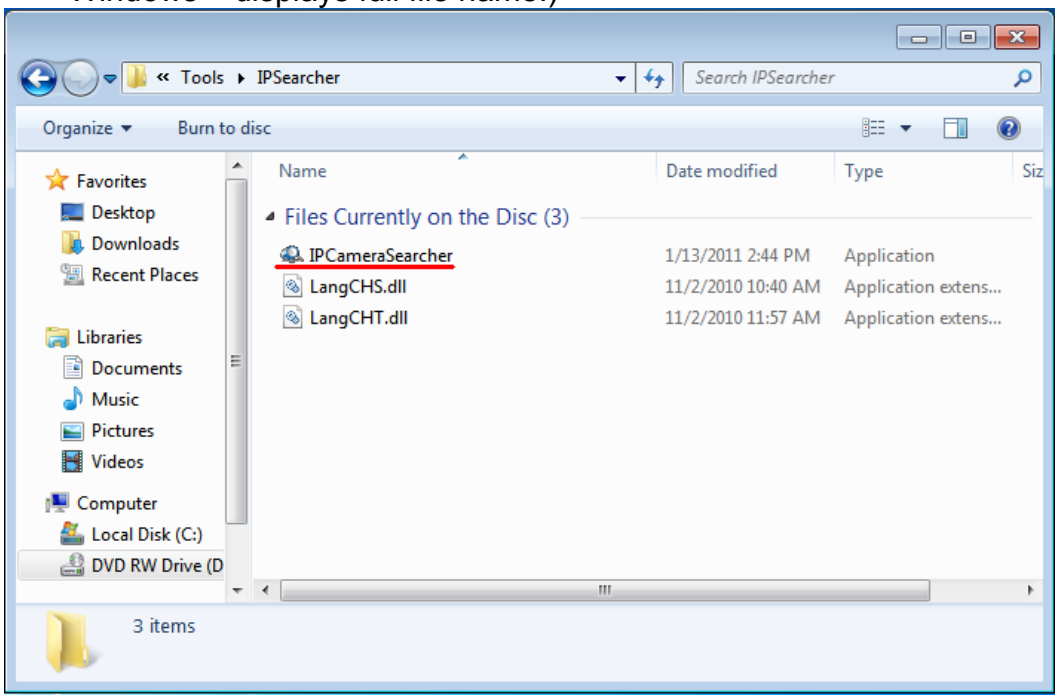
■ Enter the folder [Tools] in the CD.



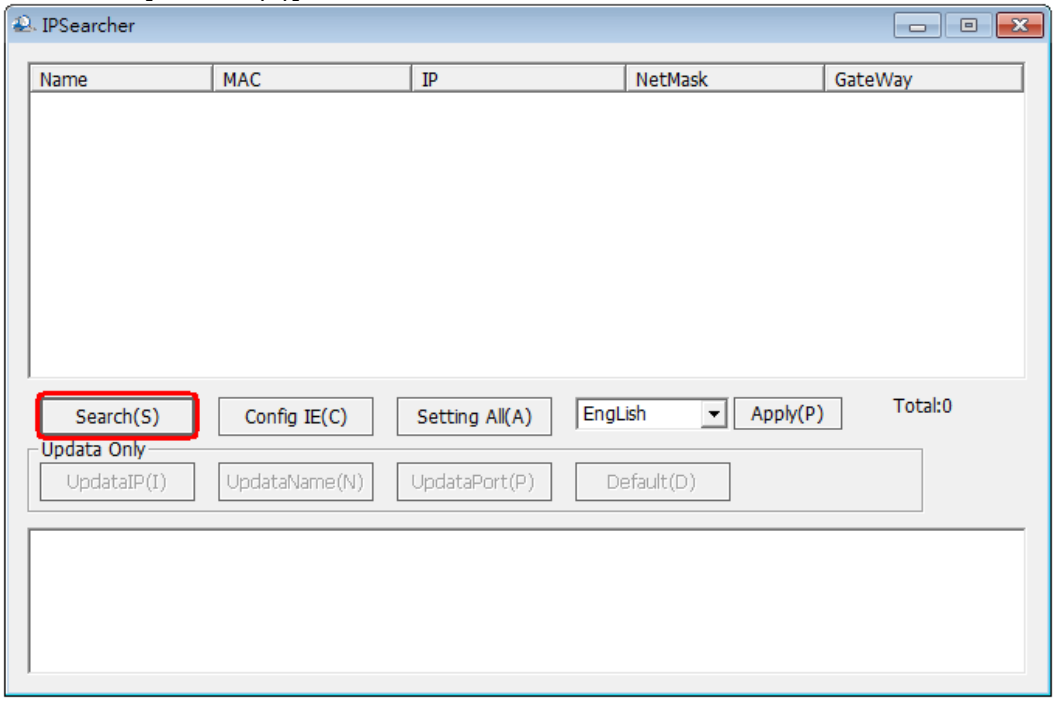
■ Double click [IPSearcher].



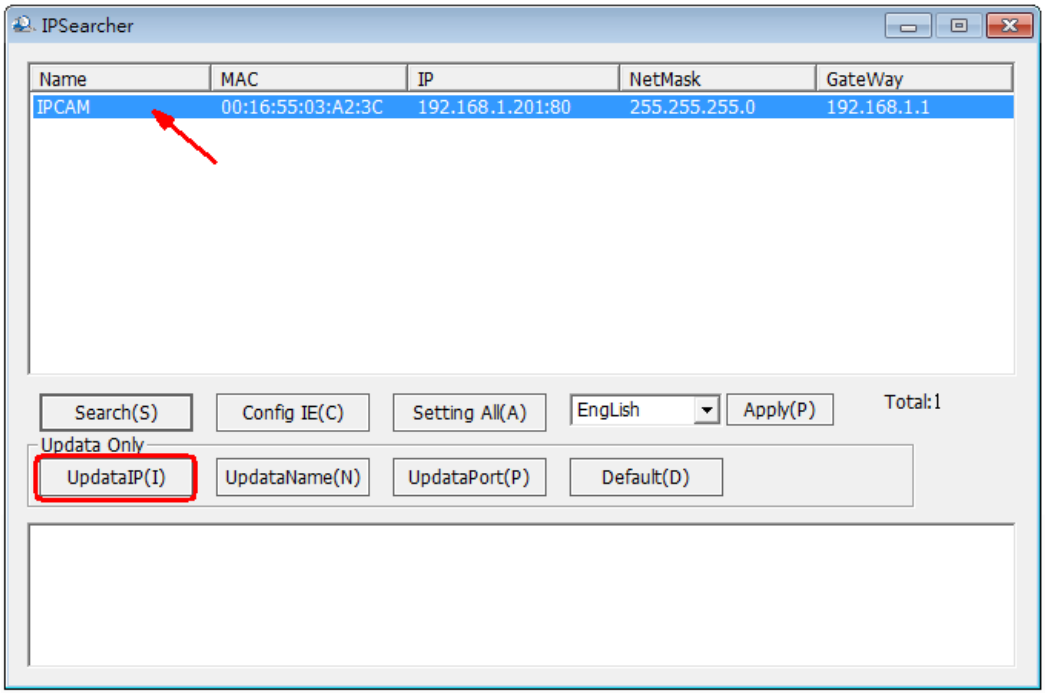
■ Running [IPCameraSearcher] (It may show “IPCameraSearcher.exe” if your Windows® displays full file name.)



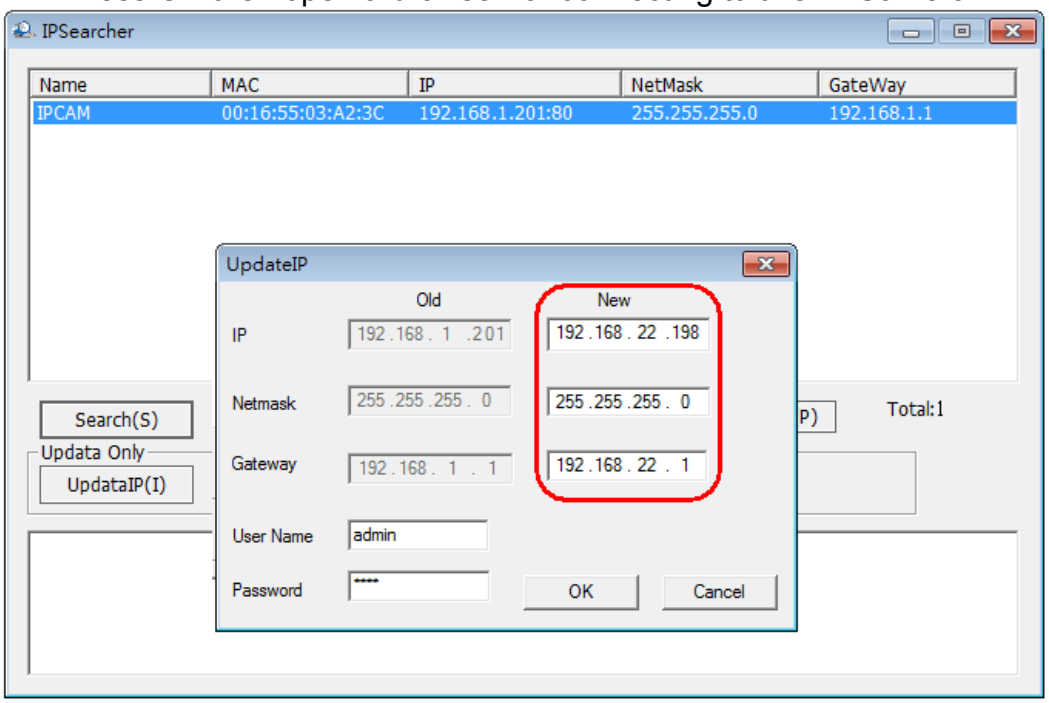
■ Click [Search(s)]



- It displays searched device(s) in 5-10 seconds, please select an IP Camera then click [UpdataIP(I)].



- Enter User Name and Password then enter new IP, Netmask and Gateway. (The default User Name is “admin”, Password is “admin”)
- Press OK then open a browser for connecting to this IP Camera.



Appendix B – HTTP/RTSP Streaming URL

IP Camera supports HTTP/RTSP streaming URL for third part CMS/NVR or software to get video from IP Camera.

- HTTP

URL: http://<ipcam:http_port>/video0.m4v
Example: http://192.168.1.221/video0.m4v

- RTSP

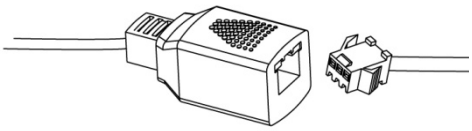
1st stream URL: rtsp://<ipcam:554>/PSIA/video0.sdp
Example: rtsp://192.168.1.221:554/video0.sdp

2nd stream URL: rtsp://<ipcam:554>/video1.sdp
Example: rtsp://192.168.1.221:554/video1.sdp

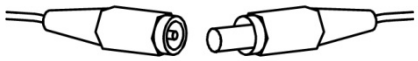
Appendix C –Waterproof tape working process

- Apply to the IP camera, RJ-45 and DC Power JACK connector junction, when exposed in the outdoor environment, increase its water-resistance.

Waterproof tape (Attached as accessories with vehicle camera)



RJ45 connector junction

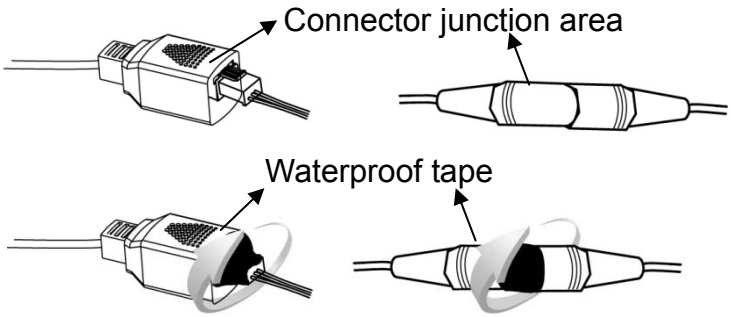


DC JACK Power connector junction

- Working process
  1. Tear the paper from waterproof tape.

  2. Completed as below photo showed. To stretch out the waterproof tape a little bit for better stickiness (Be pull gently)

  3. To wrap the water tape along the connector junction area (Please pull gently). After wrap is completed, and then push down on the tape to increase integrated closely.



Wrap the tape along the connector junction area

  4. Completed as below photo showed.

RJ45 connector junction

DC JACK Power connector junction